DATES @

June 15

Chess Club meets: The Space City Chess Club meets each Friday evening from 5:30 p.m. until 9 p.m. at the Clear Lake United Methodist Church, 16335 El Camino Real, room 423. Other meetings will be held on June 22 and 29. All skill levels are welcome. For more information, please call James Mulberry at x39287 or James Termini at x32639.

June 20

Scuba club meets: The Lunarfins meet at 7:30 p.m. For more information contact Mike Manering at x32618 or checkout www4.jsc.nasa.gov/ah/ExcEAA//leisure/Lunarfins/default.htm Spaceland Toastmasters meet: The Spaceland Toastmasters meets on Wednesday Mornings at 7 a.m. at the House of Prayer Lutheran Church 1515 Bay Area Blvd at Reseda. For more information, contact Ava Sloan at 713-768-6336 or asloan@hal-pc.org

Spaceteam Toastmasters meet: The Spaceteam Toastmasters meet at 11:30 a.m. at United Space Alliance, 600 Gemini. For more information contact Patricia Blackwell at (281) 280-6863.

June 21

Communicators meet: The Clear Lake Communicators, a Toastmasters International club, meets at 11:30 a.m. at Wyle Laboratories, 1100 Hercules, Suite 305, For more information contact Allen Prescott at (281) 282-3281or Richard Lehman at (281) 280-6557.

June 26

JSC NMA meets: The JSC National Management Association chapter meets at the Nassau Bay Hilton June 26 at 11:30 a.m. Nancy Rapoport, Dean of the University of Houston Law Center, will be the guest speaker. More information is available at www.jsc.noso.gov/nmo/

June 28

Radio Club meets: The JSC Amateur Radio Club meets at 6:30 p.m. at Piccadilly, 2465 Bay Area Blvd. For details contact Larry Dietrich at x39198.

July 2

CLA-NSS meets: The Clear Lake area chapter of the National Space Society meets at 6:30 p.m. at the Parker Williams Branch of the Harris County Library at 10851 Scarsdale Blvd. For more information contact Murray Clark at (281) 367-2227.

NSBE meets: The National Society of Black Engineers meets at 6:30 p.m. at Texas Southern University, School of Technology, first floor. For more information contact Kimberly Topps at (281) 280-2917.

July 3

Quality Society meets: The Bay Area Section of the American Society for Quality meets at 6 p.m. at Franco's Restaurant. For more information contact Ann Dorris at x38620.

July 5

Warning System Test: The site-wide Employee Warning System performs its monthly audio test at noon. For more information contact Bob Gaffney at x34249.

July 9

IAAP meets: The Clear Lake/NASA Chapter of the International Association of Administrative Professionals meets at 5:30 p.m. in the Colonial Room at Grace Community Church, 14325 Crescent Landing. Cost is \$12 payable at the door with advance reservations through Jackie L. Almanza x47274. See www.iaap-clnac.org for more information.

Aero Club meets: The Bay Area Aero Club meets at 7 p.m. at the Houston Gulf Airport clubhouse at 2750 FM 1266 in League City. For more information contact Larry Hendrickson at x32050 or checkout www.bayareaaeroclub.org

July 11

MAES meets: The Society of Mexican-American Engineers and Scientists meets at 11:30 a.m. in Bldg. 16, Rm. 111. For more information contact Margaret C. Delgado at 713-643-6097 or mcdelgad@aol.com.

July 12

Airplane Club meets: The Radio Control Airplane Club meets at 7 p.m. at the Clear Lake Park building. For more information contact Bill Langdoc at x35970.

July 13

Astronomers meet: The JSC Astronomical Society meets at 7:30 p.m. at the Center for Advanced Space Studies, 3600 Bay Area Blvd. For more information contact Chuck Shaw at x35416 or go to the website: www.ghg.net/cbr/jscas/

GILRUTH CENTER NEWS

Sign-up policy:

All classes and athletic activities are on a first-come, first-served basis. Sign up in person at the Gilruth Center and show a yellow Gilruth or weight room badge. Classes tend to fill up two weeks in advance. Payment must be made in full, by cash or by check, at the time of registration. No registration will be taken by telephone. For more information, call x33345.

Gilruth badges:

Required for use of the Gilruth Center. Employees, spouses, eligible dependents, NASA retirees and spouses may apply for photo identification badges from 7:30 a.m.-9 p.m. Monday-Friday and 9 a.m.-2 p.m. Saturdays. Cost is \$14. Dependents must be between 16 and 23 years old.

Open from 6:30 a.m.to 10 p.m. Monday-Thursday, 6:30 a.m. to 9 p.m. Friday, and 9 a.m. to 2 p.m. Saturday. Contact the Gilruth Center at (281) 483-3345. http://www4.jsc.nasa.gov/ah/exceaa/Gilruth/Gilruth.htm

Nutrition intervention program: This is a free seven-week program designed to provide an understanding of the role diet and nutrition play in health. The program includes a series of lectures and private consultations with a dietitian. You will learn how to use dietary vitamins, minerals and herbal nutriceuticals for optimizing health. Classes are held on Wednesdays from 4-5 p.m. For details call Tammie Labiche, registered dietitian, at (281) 483-2980.

Defensive driving: One-day course is offered once a month at the Gilruth Center. Pre-registration required. Cost is \$25. Call for next available class.

Stamp club: Meets every second and fourth Monday at 7 p.m. in Rm. 216. Weight safety: Required course for employees wishing to use the Gilruth weight room. Pre-registration is required. Cost is \$5. Annual weight room use fee is \$110. The cost for additional family members is \$58.

Exercise: Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays. Cost is \$24 for eight weeks.

Step/bench aerobics: Low-impact cardiovascular workout. Classes meet from 5:25-6:25 p.m. Tuesdays and Thursdays. Cost is \$40 for eight weeks.

Cardio-Kickboxing: Medium impact. Learn basic kicking and punching. Tuesday and Thursday 5:30-6:30 p.m. Cost is \$40 for eight weeks.

Yoga stretching: Stretching class of low-impact exercises designed for people of all ages and abilities in a Westernized format. Meets Thursdays 5-6 p.m. Cost is \$40 for eight weeks. Call Darrell Matula, instructor, at x38520 for more information.

Ballroom dancing: Classes meet Thursdays from 6:30-7:30 p.m. for beginner, 8:30-9:30 p.m. for intermediate and 7:30-8:30 p.m. for advanced. Cost is \$60 per couple.

Fitness program: Health-related fitness program includes a medical screening examination and a 12-week individually prescribed exercise program. For more information call Larry Wier at x30301.

Aikido: Martial arts class for men and women. Beginners meet Monday 6:30-7:30 p.m and Wednesdays 5-6 p.m. Advanced students meet Tuesday and Wednesday 5-6:30 p.m. No special equipment is needed. Aikido teaches balance and control to defend against an opponent without using force. Classes run monthly. Cost is \$45 per month. Visit a class for more information.

NASA BRIEFS

NASA GIVES GREEN LIGHT FOR DEEP IMPACT MISSION DEVELOPMENT

NASA approved development of a robotic spacecraft mission that reads more like a story line from a science fiction movie script. Imagine intercepting a comet in deep space and using a heavy projectile to blow a hole in the celestial body, some seven stories deep and about the size of a football field.

In a space exploration first, NASA's Deep Impact Mission will attempt to use a probe to collide with a comet in an attempt to peer beneath its surface. Scheduled for launch in January 2004, the unique spacecraft is expected to arrive at comet Tempel 1 in July 2005.

The 770-pound impactor, equipped with a camera, will separate from the flyby spacecraft and slam into the comet at an approximate speed of 22,300 miles per hour, blasting material from the comet into space with the force of its impact. A camera and infrared spectrometer on the flyby spacecraft, along with ground-based observatories, will study the resulting icy debris and exposed pristine interior material.

NASA's Discovery Program emphasizes lower-cost, highly focused scientific missions within the Space Science enterprise.

More information on the Deep Impact mission, including images and animations of the impact, is available on the Internet at:

http://deepimpact.jpl.nasa.gov/ http://deepimpact.umd.edu/

X-40A FREE FLIGHTS COMPLETED AT DRYDEN; X-37 NEXT

NASA's X-40A, a prototype of a space-return vehicle, successfully completed its seventh and final test flight, gathering information and clearing the way for future flights of its larger brother, the X-37.

The unpiloted X-40A, an 85-percent scale model of the X-37, 22 feet long and about 2,600 pounds, was released from an Army helicopter above NASA's Dryden Flight Research Center, Edwards, Calif. The series of two-minute descents provided valuable information for development and testing of the full-scale X-37 orbital and re-entry vehicle.

The X-37 experimental space plane is designed to demonstrate technologies in the orbital and reentry environments for next-generation reusable launch vehicles that should increase both safety and reliability, while reducing costs by tenfold.

On average, the X-40A free flights lasted approximately 75 seconds from release to landing, with the vehicle reaching speeds of more than 300 miles per hour.

Unpowered flights of the X-37, when the vehicle will be attached to NASA's B-52 carrier aircraft then released to glide to Earth, could begin as early as 2002, with orbital missions beginning in 2004.

For more on the programs at Marshall Space Flight Center, see http://www.msfc.nasa.gov/

SPACE CENTER Roundup

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Managing EditorMelissa Davismelissa.davis1@jsc.nasa.gov Assistant EditorJulie Burtjulie.v.burt1@jsc.nasa.gov Writer Eric Rauberaub1@jsc.nasa.gov

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